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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,038	06/25/2001	Matthias Wandel	555255012248	9468

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EXAMINER

BENGZON, GREG C

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,038

Applicant(s)

WANDEL ET AL

Examiner

Greg Bengzon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

This application has been examined. Claims 1-50 are pending.

Priority

This application claims benefits of priority from application 60/214080 filed on June 27, 2000.

The effective date of the claims in this application is June 27, 2000.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on August 19, 2002 was filed after the mailing date of the application on June 25 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 24 contains the trademark/trade names Mobitex and MPAK. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1-3, 10-16, 17-20, 21-23, 25-26, 28-32, 39, 44-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US Patent 6535493) hereinafter referred to as Lee.

Lee discloses of a communication protocol for critical on-site communications for mobile units using base stations connected to a LAN. Initially, the process of FIG. 8 checks whether it has received a packet from a wired network such as from the Ethernet network in step 422. If not, the process is idled at step 422 until a packet has been received from the wired network. From step 422, the process of FIG. 8 checks whether the requesting packet is an ARP request in step 424. If so, the process of FIG. 8 further checks whether or not the current AP is acting as a home agent in step 428. If the AP is not acting as home agent, the process loops back to step 422 to repeat the incoming packet routing process. Alternatively, if the current AP is acting as the home agent in step 428, a proxy ARP response is sent in step 430.

With respect to Claim 1, Lee discloses a wireless communication system, comprising: a plurality of mobile devices; a local area network (LAN); and a plurality of local base stations coupled to the LAN, wherein each local base station has a unique address on the LAN and is configured to (a) transmit and receive data packets to and from the mobile devices and (b) transfer the data packets between local base stations

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over the LAN using the unique address. (Figure 1 Column 2 Lines 50-65, Column 3 Lines 35-45, Column 4 Lines 15-60, Column 5 Lines 35-65)

With respect to Claim 2, Lee discloses a wireless communication system, comprising: a plurality of mobile devices; a local area network (LAN); a plurality of local base stations coupled to the LAN, wherein each local base station has a unique address on the LAN and is configured to transmit and receive data packets to and from the mobile devices and transfer the data packets between local base stations over the LAN using the unique address; and a subscription server operating on the LAN that stores data identifying the unique address of the local base station covering each of the mobile devices, wherein the subscription server enables the local base stations to locate any one of the mobile devices. (Figure 1 Figure 6, Column 2 Lines 50-65, Column 4 Lines 15-60, Column 5 Lines 35-65, Column 11 Lines 1-45)

With respect to Claim 3, Lee discloses the wireless communication system of claim 2, wherein the unique address is an IP address. (Column 2 Lines 50-65)

With respect to Claim 10-12, Lee discloses the wireless communication system of claim 2, wherein the subscription server also logs subscription information for each of the mobile devices in the system, wherein each local base station includes a subscription list that identifies the mobile devices currently covered by the particular

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local base station. and wherein each subscription list also includes subscription information for the mobile devices currently covered by the particular local base station. (Column 9 Lines 40-45)

With respect to Claim 13-14, Lee discloses the wireless communication system of claim 2, wherein each local base station includes a route cache that stores data identifying the unique address of local base stations last known to be covering one or more of the mobile devices wherein the route cache included in each local base station purges all data relating to any mobile device to which it has not been in communication for a set interval of time. (Figure 6, Column 9 Lines 10-25, Column 10 Lines 15-25, Column 11 Lines 5-45)

With respect to Claim 15, Lee discloses the wireless communication system of claim 2, wherein one or more of the local base stations comprises a modified personal computer (PC). (Column 13 Lines 10-25)

With respect to Claim 16, Lee discloses the wireless communication system of claim 2, wherein the system operates within an office. (Column 4 Lines 15-30)

With respect to Claim 17-20, the applicant describes a system with the same limitations as described in Claims 1-3 and Claims 10-16. Claims 17-20 are rejected on the same basis as Claims 1-3, Claims 10-16.

With respect to Claim 21, Lee discloses a local base station, comprising: a central processing unit (CPU) a sound card coupled to the CPU and configured to (a) demodulate an incoming radio frequency (RF) signal to produce an incoming frame of data, and (b) generate an outgoing modulated RF signal from an outgoing frame of data; means for transmitting the outgoing modulated RF signal to one or more of a plurality of mobile devices; means for receiving the incoming RF signal from one of the plurality of mobile devices; one or more software modules executed by the CPU that are configured to (a) extract a packet of data from the incoming frame of data, and encode the packet of data into an outgoing datagram, wherein the outgoing datagram includes addressing information identifying the location of another local base station on a local area network (LAN), and (b) extract a data packet from an incoming datagram received from the LAN, and encode the data packet into the outgoing frame of data, wherein the outgoing frame of data includes transmission information that enables the outgoing froma of data to be transmitted to the mobile device; and a network interface card coupled to the CPU and configured to transmit the outgoing datagrams to the LAN and receive the incoming datagrams from the LAN. (Figure 1, Figure 8 , Figure 9, Column 4 Lines 15-30, Column 12 Lines 1-65)

With respect to Claims 22-23, 25-26 and 28-32, Lee discloses the local base station of claim 21, wherein the sound card is a full duplex sound card; wherein the local base station is constructed using a personal computer (PC) and commercially available

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components; wherein: the LAN is an IP network; and the incoming and outgoing datagrams include an IP address; wherein: a plurality of other local base stations are coupled to the LAN and each has a unique address on the LAN; a plurality of mobile devices are each covered by one of the other local base stations; and the one or more software modules also track one or more of the plurality of mobile devices by logging the unique address of the other local base station covering each of the tracked mobile devices; further comprising: a memory device coupled to the central processing unit in which the software module logs the unique address of the other local base station covering each of the tracked mobile devices; wherein the local base station covers a plurality of mobile devices; wherein the one or more software modules also track the plurality of mobile devices covered by the local base station; further comprising: a memory device coupled to the central processing unit in which the one or more software modules log the plurality of mobile devices covered by the local base station; wherein the one or more software modules also generate system messages for transmission to the mobile device. (Figure 8, Column 3 Lines 35-40, Column 9 Lines 10-45, Column 11 Lines 10-45, CX 12 Lines 1-65, Column 13 Lines 10-35)

With respect to Claims 39, and Claims 44-49, the applicant describes a method with the same limitations as described in Claims 21, Claim 22-26 and Claims 28-32. Claims 39, and Claims 44-49 are rejected on the same basis as Claims 21, Claim 22-26 and Claims 28-32.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-9 , 33-38, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Patent 6535493) hereinafter referred to as Lee, in view of Lazaridis et al. (US Patent 6219694) hereinafter referred to as Lazaridis.

With respect to Claim 4, Lee discloses the wireless communication system of claim 2, further comprising: a module operating on the LAN and having access to a wide-area wireless network, and that is configured to (a) send and receive data packets over the wide-area wireless network to and from mobile devices that are not within range of any of the local base stations, and (b) transfer data packets to and from the local base stations over the LAN; wherein the subscription server also enables the redirection software to locate which local base station is covering any one of the mobile devices. (Figure 8 Figure 9 Column 6 Lines 25-50, Column 11 Lines 60-65, Column 12 Lines 1-25)

With respect to Claim 5, Lee discloses the wireless communication system of claim 4, wherein the redirection software module has access to the wide-area wireless

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network over a wide-area computer network. (Figure 1 Column 4 Lines 35-45)

With respect to Claim 6, Lee discloses the wireless communication system of claim 4, wherein the wide-area computer network is the Internet. (Figure 1 Column 4 Lines 35-45)

With respect to Claims 33-38, Lee substantially discloses the local base station of Claim 21, as described in prior rejection for Claim 21.

With respect to Claim 50, Lee substantially discloses a method and system with the same limitations as described in prior rejections for Claims 1-3, 10-16, 17-20, 21-26, 28-32, 39, 44-49.

However with respect to Claims 7-9, Lee does not disclose the wireless communication system with a redirection software module, wherein the redirection software module is also configured to combine one or more data packets into an electronic message; wherein the redirection software is also configured to transfer electronic messages into an electronic mailbox; further comprising: a mail server operating on the LAN and having access to the wide-area computer network, and that sends and receives data packets to and from the wide-area computer network; wherein, the redirection software module is also configured to send and receive data packets to and from the mail server.

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However with respect to Claims 33-38, Lee does not disclose the local base station of claim 21, wherein the one or more software modules also maintain a queue of packets of data to be directed over the LAN; wherein the one or more software modules also repeatedly instruct the network interface card to transmit the outgoing datagram to the LAN until a signal is received indicating that the outgoing datagram has been received by another local base station; wherein the one or more software modules also repeatedly instructs the sound card to transmit the outgoing modulated RF signal until a signal is received indicating that the mobile device has received the modulated RF signal; wherein the one or more software modules also coordinate the receipt and transmission of the outgoing and incoming RF signals to and from the sound card; wherein the one or more software modules also coordinate the receipt and transmission of outgoing and incoming datagrams to and from the LAN.

With respect to Claim 50, Lee does not disclose determining whether the second mobile device is active; if the second mobile device is active, then transmitting the message from the B-Node base station; if the second mobile device is not active, then (a) sending a communication to an electronic mailbox accessible by the second mobile device that indicates that the message is waiting, (b) waiting until the second mobile device becomes active, and (c) transmitting the message from the B-Node base station

Lazaridis discloses of a communication system for mobile communication devices over a LAN, using a redirector software wherein the redirector repackages the

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messages as email and whenever appropriate, forwards the email to an email server.

Furthermore, Lazaridis describes the system wherein the outgoing datagram is continuously sent to the desired mobile device until an acknowledgement is received; and wherein the system controls and coordinates the receipt and transmission of datagrams depending on the user commands and by sensing networked events. (Figure

1Column 1 Lines 25-35, Column 2 Lines 25-35, Column 6 Lines 30-50, Column 7 Lines 50-45, Column 8 Lines 30-55, Column 10 Lines 50-65, Column 11 Lines 25-45)

With respect to Claim 50, Lazaridis discloses of sensing when the user is no longer in the vicinity of the host system, and of storing messages destined for the mobile device until such a time that the system receives an indication that the mobile device is ready to receive the messages.

Lee and Lazaridis are analogous art because they present concepts and practices regarding communication systems for mobile communication devices involving text and voice data over a LAN. It is respectfully suggested that at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teachings of Lazaridis regarding 1) the redirector software and 2) storing and processing of data packets destined and originating from mobile devices, and 3) coordinating transmission and reception of said data packets, 4) 'pushing' data to the mobile devices, 5) sensing whether the user is no longer within the vicinity of the host into the method and 6) configuring and detecting a particular user-defined event, into the system of Lee. The suggested motivation would have been, as Lazaridis suggests, to overcome the bandwidth limitations in wireless networks and implement

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the practice of 'pushing data' to the mobile user in order to facilitate timely responses to critical or emergency communications. Due to the bandwidth limitations of wireless networks, only a portion of a data item is generally redirected to the user's mobile device, with the user given the option of then retrieving the entire data item (or some other portion of the data item) from the host system. Without the implementing the push a mobile user may fail to respond to an emergency updates, requests, meeting notifications, and news bulletins because the user only periodically checks for updates and stored messages.

Therefore it would have been obvious to combine the teachings of Lazaridis with the method and system of Lee in order to arrive at the invention described in Claims 4-8, 33-38, and 50.

Claims 27, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Patent 6535493) hereinafter referred to as Lee, in view of Hundscheidt et al. (US Patent 6691164) hereinafter referred to as Hundscheidt.

With respect to Claim 27, Lee substantially discloses the local base station of claim 26, as described in the prior rejections for Claims 26.

With respect to Claim 40-43, Lee substantially discloses the method of claim 39, as described in the prior rejection for Claim 39.

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However Lee does not disclose the local base station of claim 26, wherein the one or more software modules also ensure that more than one of the plurality of mobile devices do not simultaneously transmit an incoming RF signal to the local base station. Lee does not disclose the method of Claim 39 wherein the step of locating the second mobile device is preceded by the additional steps of: verifying that the first mobile device has a valid subscription to the wireless communication system; and if the first mobile device does not have a valid subscription to the wireless communication system, then skipping the remaining steps. Lee does not disclose of the method of claim 40, wherein the step of verifying that the first mobile device has a valid subscription to the wireless communication system is performed by accessing the subscription server; wherein the step of verifying that the first mobile device has a valid subscription comprises the steps of: accessing a subscription list on the A-Node base station to verify that the first mobile device has a valid subscription to the wireless communication system, wherein the subscription list includes a log of the mobile devices last known to be within coverage; and if the first mobile device is not logged in the subscription list, then accessing the subscription server to verify that the first mobile device has a valid subscription to the wireless communication system; wherein the step of verifying that the first mobile device has a valid subscription comprises the steps of: accessing a subscription list on the A-Node base station to verify that the first mobile device has a valid subscription to the wireless communication system, wherein the subscription list includes a log of the mobile devices last known to be within coverage; and if the first mobile device is not logged in the subscription list, then (a) accessing the subscription

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server to verify that the first mobile device has a valid subscription to the wireless communication system, and (b) updating the subscription list to include a record for the first mobile device.

Hundscheidt discloses of a communications system for mobile devices for mobile communication devices over a LAN, employing base stations for facilitating mobile roaming. Hundscheidt discloses of checking the mobility servers and profile servers for determining whether to allow the mobile user to connect and send messages via the base stations. The approval decision is based on subscription data, geographic location and network loading. (Column 3 Lines 45-65, Column 4 Lines 1-25, Column 4 Lines 45-65, Column 5 Lines 1-30)

Lee and Hundscheidt are analogous art because they present concepts and practices regarding mobile communications over local base stations while facilitating the mobile roaming process. It is respectfully suggested that at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teachings of Hundscheidt regarding the system of call handling, with approval based on valid subscriptions and network load conditions, into the method and system by Lee. The suggested motivation for doing so, as suggested by Hundscheidt, would be to 1) allow for uniform subscriber handling across a number of disparate access networks, and 2) eliminate the need for special mechanisms to keep data consistent across the network in case of restarts and profile modifications.

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Therefore it would have been obvious to combine the teachings of Hundscheidt into the method and system of Lee , in order to obtain the invention described in Claims 27, and 40-43.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to the enclosed PTO-892 form.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571)272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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